

REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claims 1, 3, 9-11 and 22 have been canceled without prejudice or disclaimer. Claims 12, 25 and 28 have been amended. New claims 29-37 have been added. The amendments to claims 12, 25 and 28 are supported by at least Figures 4a and 4b of the present application. New claims 29-37 are supported by at least claims 23-28 and the Figures of the present application. No new matter has been added.

Priority

At least claims 26, 27, 29, and 31-34 of the present application are fully supported by U.S. Provisional Application No. 60/155,611 filed on September 23, 1999, and U.S. Application Serial No. 09/669,060 filed on September 22, 2000. Therefore, Applicants submit that the effective filing date of at least claims 26, 27, 29, and 31-34 is September 23, 1999.

§103 Rejections

Claims 1, 3, 9-11, 22-24, 26 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Von Oepen (U.S. 6,048,361) in view of Jang (U.S. 5,749,848). Applicants respectfully traverse this rejection. As noted above, claims 1, 3, 9-11 and 22 have been canceled, rendering this rejection moot as to those claims. Applicants do not otherwise concede the correctness of this rejection.

Claims 12, 25 and 28 were rejected under 35 U.S.C. §103(a) as being unpatentable over Von Oepen in view of Jang and Solomon (U.S. 5,846,204). Applicants respectfully traverse this rejection.

Von Oepen discloses a stent delivery system that includes a stent having a side opening 22 along a length of the stent. Von Oepen fails to disclose or suggest the use of an ultrasound transducer. Jang discloses a catheter system that includes an ultrasound device 75 fixed to a distal end of a drive shaft 45. The ultrasound device 75 is advanced through a balloon 65 and prosthetic device 90 (e.g., stent or prosthesis) where the device 75 is used to provide images of one or both of the proximal and distal ends of the prosthetic device 90 to ensure that the

prosthesis is positioned at a desired location away from a branching segment of the blood vessel and overlapping with healthy segments of the vessel at both ends of the prosthetic device 90. The imaging device 75 is also used to determine a diameter of the expanded prosthetic device 90 to ensure that the expanded form is maintained sufficiently large after recoil. Von Oepen and Jang fail to disclose or suggest an ultrasound transducer housing.

The ultrasound housing 104 disclosed by Solomon does not include a passage that extends through a central portion of the housing 104. The sleeve 108 disclosed by Solomon that defines a guidewire passage 114 is positioned on an outer side of the housing 104. The guidewire passage does not extend through a central portion of housing 104. Therefore, Solomon fails to disclose or suggest, alone or in combination with Jang and Von Oepen, every limitation of claims 12, 25 and 28, and the claims that depend from them.

New Claims

New claims 29-37 have been added. Applicants submit that the prior art of record, in particular Von Oepen and Jang, fails to disclose or suggest every limitation of claims 29-34. Von Oepen and Jang fail to disclose or suggest "imagining the body lumen through the side opening with the transducer to locate an ostium of a branch vessel of the body lumen; and aligning the stent side opening with the ostium," as required by claim 29. Jang discloses only the imaging of proximal and distal ends of the prosthesis 65. Jang fails to disclose or suggest imaging along a length of the prosthesis 90 for purposes other than determining an internal diameter of the prosthesis 90 in the expanded state. Jang clearly fails to disclose or suggest imaging an ostium of a branch vessel through a defined side opening of the prosthesis 90.

Furthermore, Jang specifically discloses the use of an ultrasonic device for positioning the prosthesis 90 at a longitudinal position that is *not covering* an opening into a branch vessel. Jang fails to disclose or suggest the use of ultrasonic imaging for aligning a feature of the prosthesis (e.g., a side opening of a stent) with the opening into the branch vessel, thus *covering* the branch vessel opening with the prosthesis. Jang teaches away from the limitations of claim 29. Applicants submit that prior art of record fails to disclose or suggest every limitation of claim 29 and the claims that depend from it.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance. If a telephone conference would be helpful in resolving any further issues related to this matter, please contact Applicants attorney listed below at 612.371.5387.

Respectfully submitted,



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